Social Policy and the Role of the Behavior Analyst in the Prevention of Delinquent Behavior

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The purpose of this article is to encourage behavior analysts to expand their domain of interest and application to include the "social/political" contingencies that are developed and implemented by policymakers and lawmakers. Using the Vermont juvenile justice system as a prototype, examples are provided that focus on the tertiary, secondary, and primary prevention of delinquent behavior.

Key words: social policy, behavior analysis, delinquent, prevention, probation, custody

The most prominent role for the applied behavior analyst in the field of crime and delinquency has been to administer and evaluate intervention programs with either individual offenders or groups of offenders (Burchard & Lane, 1982; Nietzel, 1979). In general, these behavioral programs have been conducted in both community-based and institutional settings. Although these programs have usually been successful, the generalization of those changes to the more natural environment and the long term effects of those programs have been less encouraging (Gottschalk, Davidson, Mayer, & Gensheimer, in press; Nietzel & Himelein, in press).

More recently the emphasis has shifted to prevention and early intervention (Burchard & Burchard, in press). Behaviorists seem to be saying that a better strategy is to try to prevent the delinquent/criminal behavior from occurring in the first place. The preceding articles by Nietzel and Himelein (1987) and Bank, Patterson, and Reid (1987) in this issue of *The Behavior Analyst* are good examples of this emphasis on prevention.

The purpose of the present paper is to

further this emphasis on prevention, but from a different perspective. Instead of the more traditional one-on-one contingency management programs that modify the behavior of potential offenders, their significant others, or their victims, this paper focuses on social/political contingencies (e.g., social policy) that affect the behavior of an entire class of offenders or potential offenders (Burchard, in press).

THERAPEUTIC VERSUS SOCIAL/ POLITICAL CONTINGENCIES

A critical distinction needs to be drawn between therapeutic contingencies and social/political contingencies. A contingency is defined as a functional relationship between a behavior and the environmental events that precede and follow it. In general, a contingency exists when an environmental event (antecedent stimulus) sets the occasion for a particular response that will result in some form of reinforcement, punishment, or extinction (consequence).

Therapeutic contingencies are contingencies that are established in accordance with the principles of operant conditioning to help people adapt to their environment. Therapeutic contingencies are typically designed by behavior therapists or behavior analysts. In contrast, social/political contingencies are contingencies that are established by administrators or legislators. These contingencies are also referred to as rules, regulations, policies, or laws. Although social/political contingencies are designed to influence or mod-

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TABLE 1
Population Data for the State Vermont (July, 1986)

Total population	535,000	
Total youths, age-eligible for		
juvenile delinquency		
(ages 10 through 17)	64,982	
Total delinquent youths	386	
Delinquents in custody	145	
Delinquents on probation	241	

ify peoples' behavior, they may or may not be established in accordance with the principles of behavior. Examples of social/political contingencies are (a) placement in a residential program (e.g., foster home, group home, or training school) as consequence of breaking into someone's home, (b) expulsion from school for possession of marijuana, and (c) court-ordered restitution for vandalism.

Social/political contingencies are critical to the role of the applied behavior analyst in the prevention of delinquent behavior for the following reasons:

- 1. They can have a powerful influence on the relationship between environment and behavior. In fact, they can determine one's total environment. Therefore, they are relevant to any behavioral approach that pertains to the prevention or modification of delinquent behavior.
- 2. They influence the behavior of all offenders or potential offenders.
- 3. They influence the behavior of all behavior analysts who work with offenders or potential offenders.
- They can be beneficial or detrimental to the prevention or modification of delinquent behavior.
- 5. They are rarely established or even rarely influenced by persons trained in behavior analysis.

In the remainder of this paper, the juvenile justice system in the State of Vermont will be used as a prototype to analyze the role of a few social/political contingencies relevant to the prevention of delinquent behavior. The purpose is to illustrate why the future of delinquency prevention lies more in the modification of social/political contingencies than in the development of more effective therapeutic contingencies. Behavior analysts can and should make a significant contribution towards that future.

In making the case for a change in preventive strategies, some epidemiological characteristics of the existing population of juvenile delinquents in Vermont are first presented—how many there are, how they are identified and how they are treated. This will provide a general picture of what the State is trying to prevent, and will also illustrate some of the main social/political contingencies that make up the current juvenile justice system. The epidemiological data will be followed by a description of a change in one social/ political contingency that might produce a more cost-effective system. The change involves wrapping more services around delinguent youths in community-based settings while placing fewer youths in structured, restrictive programs such as training schools or institutions. This is an example of tertiary prevention (the prevention of further delinquent behavior). The paper concludes with a brief discussion of some social/political contingencies in the area of secondary prevention (the prevention of delinquent behavior with youths at risk of becoming delinquent) and primary prevention (prevention programs that apply to an entire population of people).

TERTIARY PREVENTION

In terms of population estimates, Table 1 shows the number of people residing in Vermont on a given day in July, 1986; the number of youths age-eligible to become delinquent (e.g., youths ages 10 through 17); and the number of youths adjudicated delinquent in custody and delinquent on probation. In terms of youths who are legally identified as delinquent, the total population was 386 or .59% of the age-eligible population. Of the total population of delinquents, 38% were in custody and 62% were on probation.

Table 2 provides information pertaining to the state's efforts to rehabilitate those 386 delinquents (e.g., tertiary prevention). In general, all of the delinquents on probation were at home where the primary intervention consisted of supervision from a caseworker. Although

caseloads varied, the average caseworker had a caseload of approximately 35 youths. Of the delinquents in custody, 65% were residing in some form of substitute residential program ranging from supervised, independent living in the community to an institutional placement located out of state. The other 35% who were at home on that given day were most likely either on their way to or returning from a placement in a substitute, residential program. Also shown in Table 2 are the average annual costs per bed for the different types of residential placement.

In general, the social/political contingencies for handling Vermont's delinquent population are similar to those in other states. Lesser offenses tend to result in probation (e.g., a judge orders a youth to be home by a certain time each night, attend school, avoid certain peers, pay a victim for damages, etc.) for which a caseworker provides supervision. More serious offenses tend to result in state custody and placement in a more restricted, residential program.

From a systems perspective, the issue of prevention raises two critical questions. First, what resources are being provided and, second, do those resources make a difference? If the cost of the caseworker is disregarded (a relative constant for all delinquent youths), the existing resource priorities are clear. Approximately 1.5 million dollars of the annual budget are spent on the delinquents in custody, while almost nothing is spent on those on probation.

Although resource allocations are relatively easy to determine, their impact on behavior is much more difficult to evaluate. However, some preliminary data from a four-year follow-up study suggest that the rehabilitation system is not very cost-effective. During a five month period ending on April 30, 1980, 24 youths were adjudicated delinquents in custody and 80 youths were adjudicated delinquents on probation. As of July 1, 1984, approximately four years later, 62.5% of those delinquents who had been in custody and 44% for those delinquents who had been on probation were con-

TABLE 2

Type and cost of placement (July, 1986)

Type of placement	Delin- quents in custody	Delin- quents on pro- bation	Approxi- mate annual cost per bed
Home	52	241	0
Independent living	13		\$ 3,400
Foster homes	27		\$ 4,500
Group home	39		\$20,000
Institution	14		\$44,000
Totals	145	241	

victed of at least one adult crime. Of the total of 104 youths, 51 had been convicted of 146 crimes (60 index crimes and 86 non-index crimes). Even more alarming is the fact that 29 of the delinquent youth were still under 19 years of age when the initial follow-up was conducted.

This description of how the Vermont system works and some preliminary data suggesting that it does not work very well for most youths is neither new nor helpful. A more important focus is where to go from here and, more specifically, what role behavior analysts might play in that process. To come back to the earlier discussion of therapeutic and social/political contingencies management, one possible solution might be to increase efforts to provide more therapeutic contingency management. But this strategy has problems. First, the manpower is not available to reach all delinquents on a oneon-one basis (Albee, 1985). In fact, based on the current frequency of research publications, fewer behavior analysts are working with delinquents now than ten years ago. Second, by adding more therapeutic contingency management programs, behavior analysts would be increasing their role as servants to a social/ political contingency management system that is not working.

As noted above, the existing system allocates almost all of its resources to a relatively small percentage of delinquent youths who are placed in the more re-

strictive residential settings. Although the programs in Vermont tend not to be administered by behavior analysts, no good data suggest that more delinquents would be rehabilitated if behavior analysts did administer those programs. A better strategy is to change some of the social/ political contingencies so that the limited resources and appropriate behavioral technologies get to selected youths at the front end of the juvenile justice system. This can be accomplished by targeting resources to those youths who are most likely to engage in further delinquent behavior. Although the technology for making such predictions is far from perfect, there is certainly room for improvement in a system that indiscriminately directs almost all its resources to delinquents in custody and almost no resources to delinquents on probation. Relying on the courts to determine which delinquents receive services generates a high rate of error. For example, in the four year follow-up study mentioned above, more adult index crimes were committed by the delinquents who were on probation (39 crimes by 23 youths) than by the delinquents who were in custody (21 crimes by 12 youths). Although many more delinquents were on probation than in custody, the delivery of additional services to selected delinquents on probation might have prevented some of those crimes.

Providing more services, however, does not necessarily mean making more residential placements. In fact, serious reconsideration needs to be made of the very pervasive social/political contingency in which a significant increase in antisocial behavior almost invariably results in a placement in more physically restrictive (and more costly) programs. For example, given an increase in delinquent behavior, a youth on probation (no residential costs) or in a foster home \$4,500/bed/year) might be placed in a group home (\$20,000/bed/year) or an institution (\$45,000/bed/year). Is this a good investment? Is it more cost-effective than wrapping more resources around the youth in the less restrictive setting? For example, placing a full-time staff person in a natural home or a foster

home would cost less than placing a youth in a group home. Might not that be more effective, particularly if the staff people were trained in therapeutic contingency management and could spend all of their time on a caseload of one? Although a strong argument can be made for such an alternative, its implementation would require a substantial change in existing social/political contingencies.

In order to adopt a system with a continuum of more intensive services in less restrictive settings, rather than a continuum of placements that are increasingly restrictive, one of two things must happen. Either a substantial increase in monev for the wrap-around services must be provided or a reduction must be made in placements to the more restrictive placements that corresponds (in terms of costs) to the increase in wrap-around services. The latter is probably more realistic given the limited resources that are available. In addition, intensive wraparound services might provide a more effective program for those youths who would otherwise be placed in the more restrictive placements.

Most behavior analysts who presently work with delinquents (or youths who are at risk of becoming delinquent) are not in a position to influence this type of social/political contingency. Although behavior analysts administer behavioral programs for youths in natural homes, foster homes, group homes, and institutions, they have little influence over who gets served by these programs. In an important sense, the placement decision, not the treatment program, may account for a greater percentage of the variance with respect to the prevention or rehabilitation of delinquents.

SECONDARY PREVENTION

Thus far, the focus has been on tertiary prevention, but obviously a multitude of social/political contingencies might be changed to improve our ability to prevent delinquency at a secondary level. With respect to secondary prevention, atrisk populations in which a disproportional number of youths end up being adjudicated delinquent are not difficult

to identify. The Vermont delinquents referred to above had many characteristics that distinguished them from non-delinquents even before they were adjudicated. Consider the following:

- 1. 30% of the 145 delinquents in custody referred to in Table 2 had previously been identified by the state as either unmanageable or abused/neglected children. The prevalence of those dispositions is less than 2% for all Vermont children.
- 2. 40% of the natural families of the 386 delinquent youths are receiving welfare. Less than 10% of all Vermont children live in families on welfare.
- 3. 43% of the natural families of the 386 delinquents are headed by a single parent. Only 15% of all Vermont children live in a single-parent family.

With respect to the at-risk child, the role of the behavior analyst has been almost exclusively one of therapeutic contingency management. Nevertheless, behavior analysts who work with children who live in poverty or children who are abused/neglected or unmanageable are faced with a multitude of social/political contingencies. Unfortunately many of these social/political contingencies create barriers to the very outcomes they are designed to achieve. Take, for example, the mother on welfare who is motivated to become self-sufficient, but who will lose the medical insurance for her children if she does so; or the single mother who is working at minimum wage and is unable to provide after-school supervision for her children; or the teenage mother who never had any exposure to sex education or child care while in school.

Although identifying at-risk factors is not difficult, we have not been nearly as successful in implementing social/political contingencies to reduce those factors. The potential outcome for such an investment, however, is considerable. Unlike therapeutic contingencies, which only influence the participants of a particular behavior modification program, social/political contingencies have the potential to impact an entire class of youths.

PRIMARY PREVENTION

With respect to primary prevention, the role of the behavior analyst has been even more diluted. Nevertheless, many social/political contingencies could be applied to large groups or entire populations to prevent delinquent behavior (Leitenberg, in press). For example, in the field of public health, one of the many Surgeon General's (1980) objectives is the following:

By 1990, virtually all infants should be able to participate in primary health care that includes well child care; growth development assessment; immunization; screening, diagnosis and treatment for conditions requiring special services

Clearly, a disproportional number of our existing population of delinquents have experienced poor prenatal care and low birth weight, and in general would have benefited from good post-natal health care (Werner, in press). Nevertheless, we will not even come close to reaching the above objective without more effective social/political contingencies to make it happen.

Much more could also be done to prevent delinquency in the areas of education and the media. Every student could be offered a comprehensive course in parent training and child care before they could graduate or obtain a GED. In order to reach those who drop out of school, such training could be a prerequisite to obtain AFDC. Another possibility in the field of education would be to expand the legislative ban on the use of corporal punishment in our schools and child care facilities. At present, teachers, principals, and child care providers are prohibited from hitting kids in only seven out of fifty states. As for the media, any contingency that reduced the incredible amount of violence that is viewed by children would be beneficial.

SUMMARY

In summary, behavior analysts have made considerable progress in the development of one-on-one, therapeutic contingency management programs. Those programs tend to employ state-of-the-art techniques derived from our extensive knowledge about how behavior is acquired, maintained, and modified. But if the issue is the prevention of delinquency, or even a reduction in the incidence of delinquent behavior, behavior analysts must broaden their focus. So-

cial/political contingencies should be brought into the realm of behavior analysis and behavior therapy. Not only would this change result in more effective contingency management systems, but it would also bring the expertise of the behavior analyst to many more potential delinquents.

REFERENCES

- Albee, G. W. (1985, February). The answer is prevention. *Psychology Today*, 19, 60-64.
- Bank, L., Patterson, G. R., & Reid, J. B. (1987). Delinquency prevention through training parents in family management. *The Behavior Analyst*, 10, 75-82.
- Burchard, J. D. (in press). Social and political challenges to behavioral programs with delinquents and criminals. In E. K. Morris & C. J. Braukmann (Eds.), Behavioral approaches to crime and delinquency. New York: Plenum.
- Burchard, J. D., & Burchard, S. N. (Eds.). (in press). The prevention of delinquent behavior. Newbury Park: Sage.
- Burchard, J. D., & Lane, R. W. (1982). Crime and delinquency. In A. S. Bellack, H. Hersen, & A. E. Kazdin (Eds.), *International handbook of behavior modification and therapy* (pp. 613-652). New York: Plenum.

- Gottschalk, R., Davidson, W. S., Mayer, J., & Gensheimer, L. (in press). Behavioral approaches with juvenile offenders: A meta-analysis of long term treatment efficacy. In E. K. Morris & C. J. Braukmann (Eds.), Behavioral approaches to crime and delinquency. New York: Plenum.
- Leitenberg, H. (in press). The primary prevention of delinquency. In J. D. Burchard & S. N. Burchard (Eds.), *The prevention of delinquent behavior*. Newbury Park: Sage.
- Nietzel, N. T. (1979). Crime and its modification: A social learning perspective. New York: Pergamon Press.
- Nietzel, M. T., & Himelein, M. J. (1987). Crime prevention through social and physical environmental change. The Behavior Analyst, 10, 69-74
- Nietzel, M. T., & Himelein, M. J. (in press). Probation and parole. In E. K. Morris & C. J. Braukmann (Eds.), *Behavioral approaches to crime and delinguency*. New York: Plenum.
- Surgeon General (1980). Promoting health and preventing disease: Objectives for the nation. Department of Health and Human Services. Washington: U.S. Government Printing Office.
- Werner, E. E. (in press). Vulnerability and resiliency in children at-risk for delinquency: A longitudinal study from birth to young adulthood. In J. D. Burchard & S. N. Burchard (Eds.), *The prevention of delinquent behavior*. Newbury Park: Sage.